

Chp 26 - Imperfect Competition - Pg 1

↳ Previously, we examined industries in which there were many sellers w/no market power (pure competition) and those dominated by one firm w/dominant market power (monopoly).

↳ We now turn to the examination of industries dominated by ~~several~~ several firms and how strategic behavior influences decisions in the market.

Def: Oligopolies are industries dominated by a small number of firms who jointly wield market power and whose decisions are based upon the perceived and/or actual reaction of other firms in the industries.

Oligopolies are characterized by:

1. Several Dominant Firms
2. Significant Barriers to Entry
3. Interdependent decision making
4. Market power through joint action
5. Potential long-run profits

Monopolistic Competition, on the other hand, looks at industries where heterogeneous products are produced but product heterogeneity is limited, for example, computers, cars, baked goods, fuses, etc.

Monopolistic Competition is characterized by:

1. Numerous buyers and sellers
2. Heterogeneous products that are close substitutes ($Ed \neq \infty$ as w/purely competitive firms)
3. minimal costs to entry/exit in long-run
4. No long run economic profits

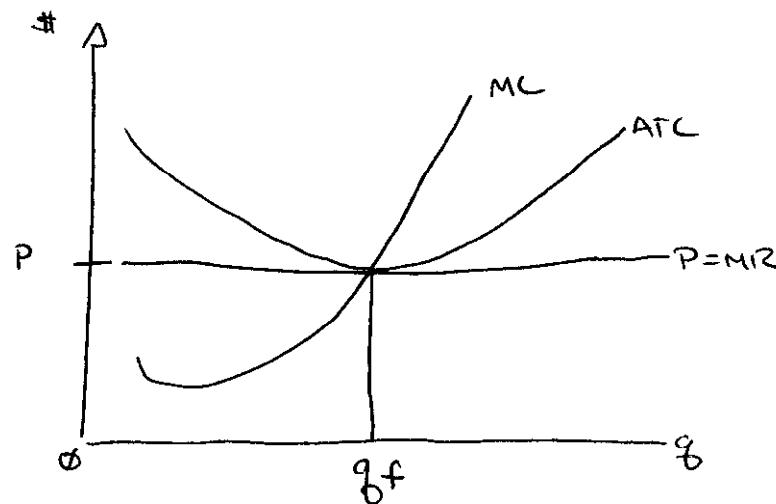
Note: Discuss product differentiation

→ Advertising

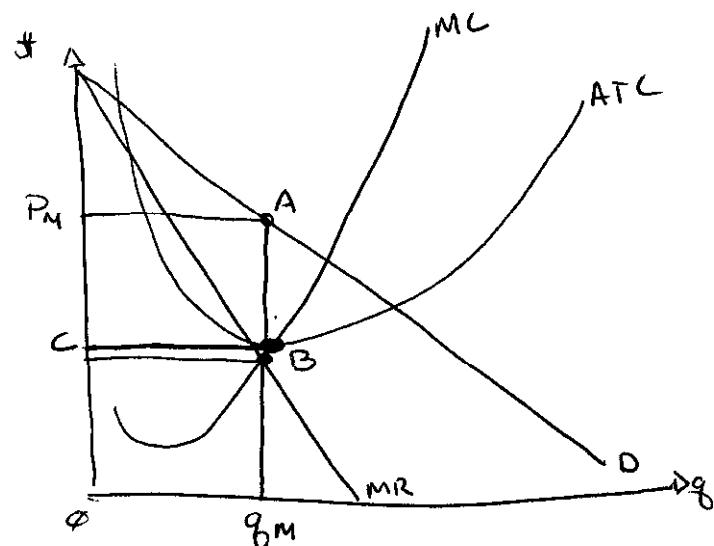
→ Homogeneity vs Heterogeneity

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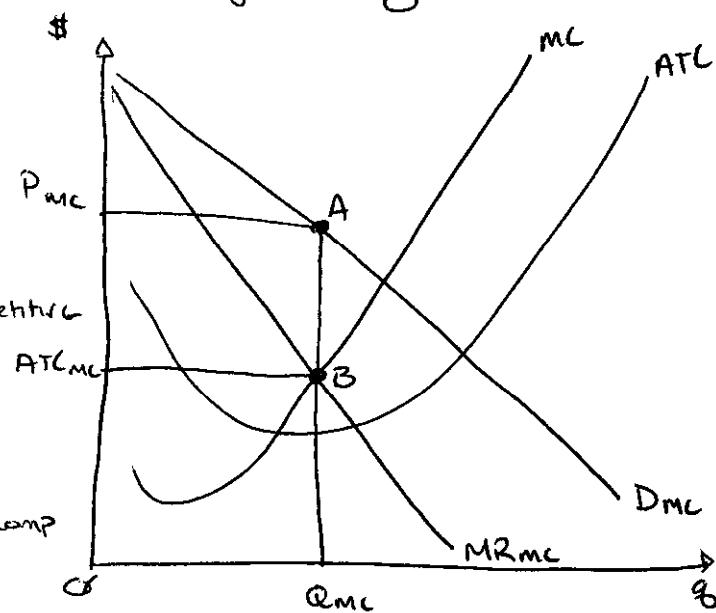
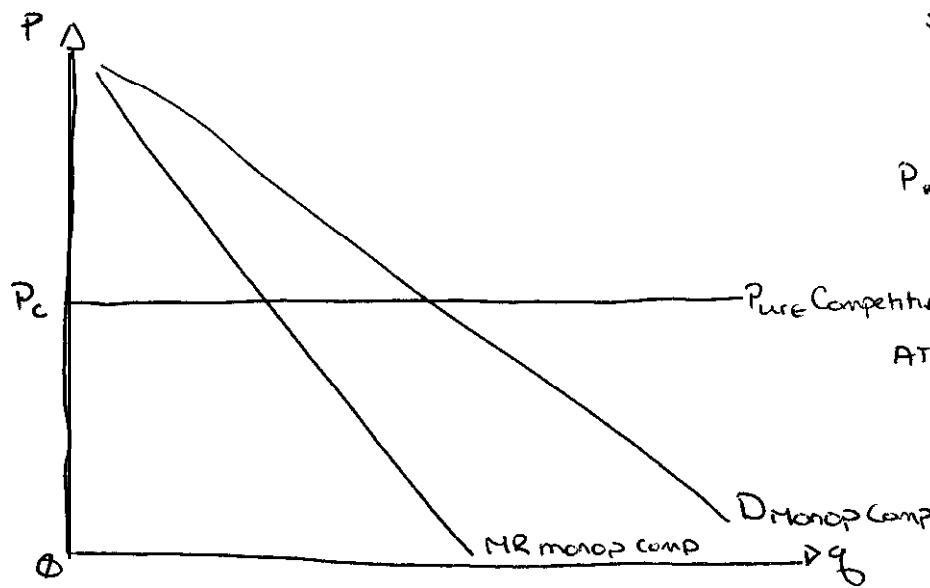
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pure competition
long-run equilibrium
no economic profits
price taking
homogenous product



Monopoly
short and long run profit
price maker
market power
 $P_M > ATC \rightarrow \text{profit}$
X-inefficiency



→ since purely competitive firms sell a homogenous product, there are numerous perfect substitutes, thus $Ed = \infty$

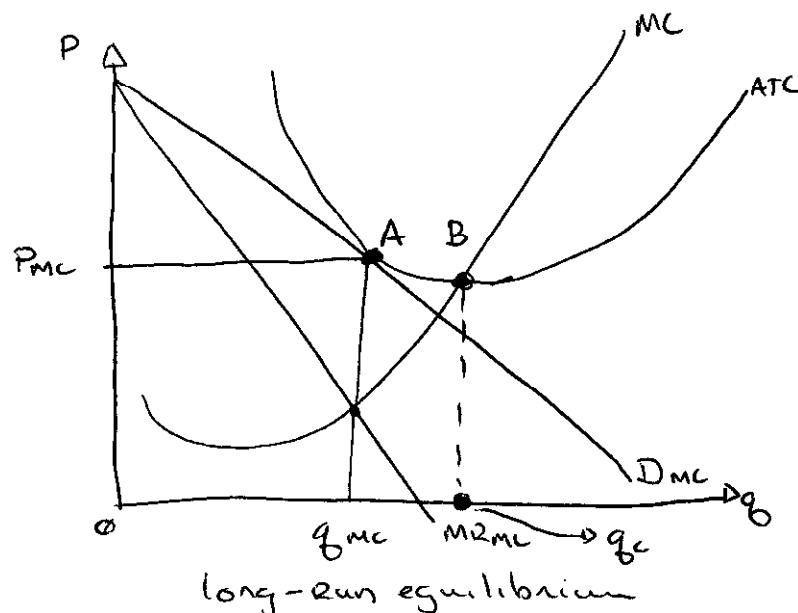
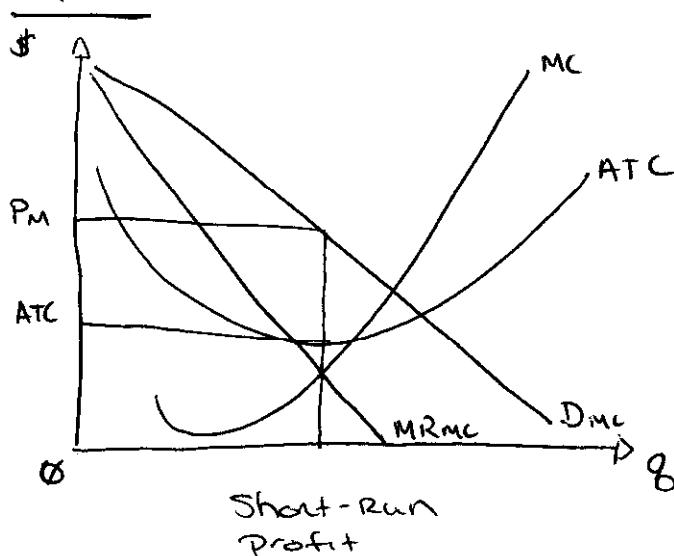
→ Since monopolistic competitors sell differentiated products, then they exercise some market power since their products are imperfect substitutes, so $Ed < \infty$

Monopolistic competition

↳ short-run profit
 $\frac{P_{\text{mc}} \cdot Q_{\text{mc}} - ATC_{\text{mc}} \cdot Q_{\text{mc}}}{Q_{\text{mc}}}$

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in the long-run, firms enter/exit the industry (low entry/exit costs), adjusting market supply and demand such that $P = LRATC$.

Note that for the monopolistic competitor firm that $q_{mc} < q_{fc}$, that is output per firm is less than if the firm operated as a purely competitive firm.

↳ pt A is the point on ATC where the long-run monopolistic competitive equilibrium exists but this is not the most efficient level of output (pt B)

(thus, Allocative and productive efficiencies occur in that $q_{mc} < q_{fc}$ (allocative) and $LRATC_{mc} < LRATC_{pc}$

Oligopoly

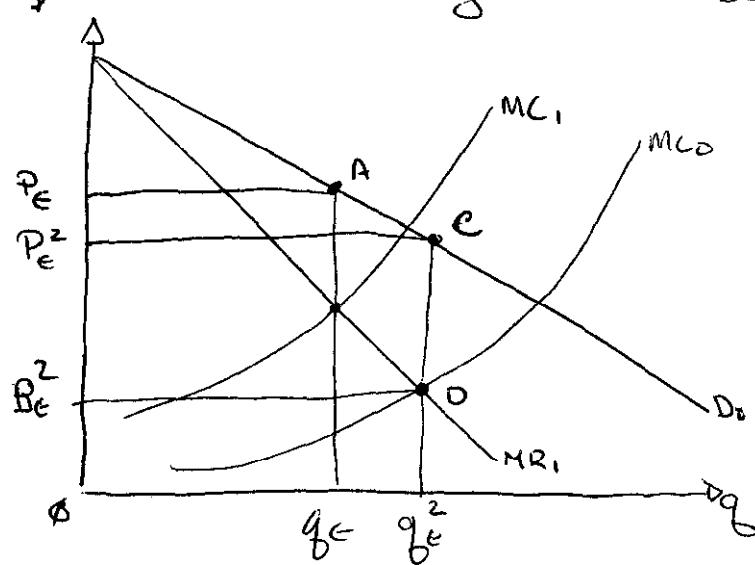
↳ Oligopolistic firms enjoy market power at a cost, in that no firm is ~~free~~ free to act independently w/o consideration of the reaction of other firms

↳ For example, if UAL cuts its ticket price from ATL to SFO by 50%, it can expect Delta to match and engage in retaliatory pricing in UAL's home market

→ Since oligopolies are interdependent, the analysis of their decision making is slightly different relative to other types of firms.

→ Assume that there are several dominant firms in the car industry. If firm A increases their price, no other firm follows, but if firm A lowers their price, all other firms lower their price.

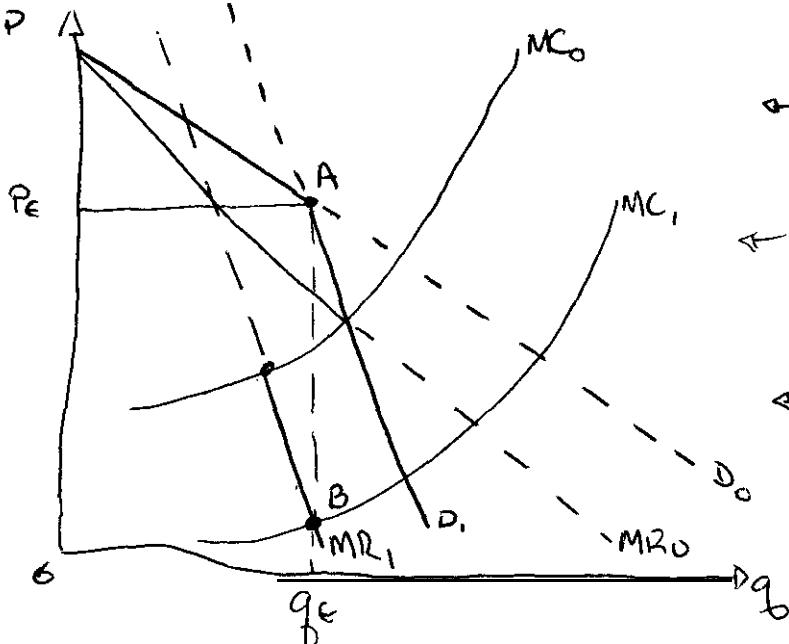
↳ This type of behavior illustrates how oligopolists have an incentive to collude, else price competition may lead to losses.



← Assume the market is in equilibrium at P_e, Q_e . The oligopolist might believe that if they realized cost savings (MC_2), they could lower price and enjoy substantial profits ($P_e^2 - D_2 B_e^2$)

→ But by lowering price, its competitors will respond by ~~inelastic~~ elastic. Also lowering price, making the actual demand curve very ~~inelastic~~ below P_e but they will not follow increases, making the curve quite ~~elastic~~ elastic above P_e , thus a kink develops in the demand curve for the oligopolistic firm

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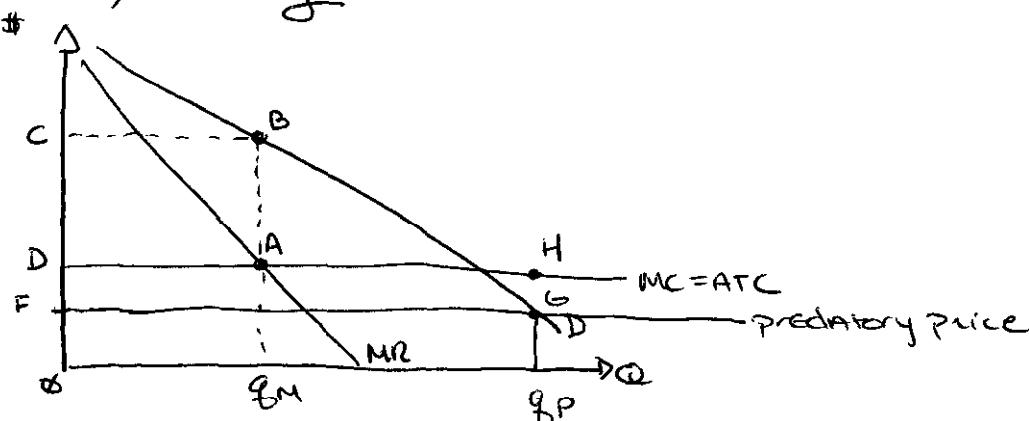
- Above A, the Demand curve is relatively elastic as other firms will not match price increases
- ← below A, the demand curve is relatively inelastic as other firms will match price decreases
- As long as costs remain between A and B, the firm will not lower P as other firms will match decreases lowering profit

→ note, the demand curve is kinked and the MR curve has a jump representing the ~~not~~ jump in MR if the firm lowers price

→ students to read cartel example

Strategic Behavior

1. Predatory Pricing



DHFG → predatory pricing loss

ABCD → monopoly profits

↳ A firm may attempt to engage in predatory pricing to drive other firms out of the market so it can reap monopoly profits

- (↳ established vs start-up airlines)
- (↳ MSFT vs NSCP)

Chp 06 → Pg 6

2. limit pricing

↳ new firms may enter market, but existing firm may
re-set price so new entrant may not reap economies
of scale and thus incur losses

3. sunk costs